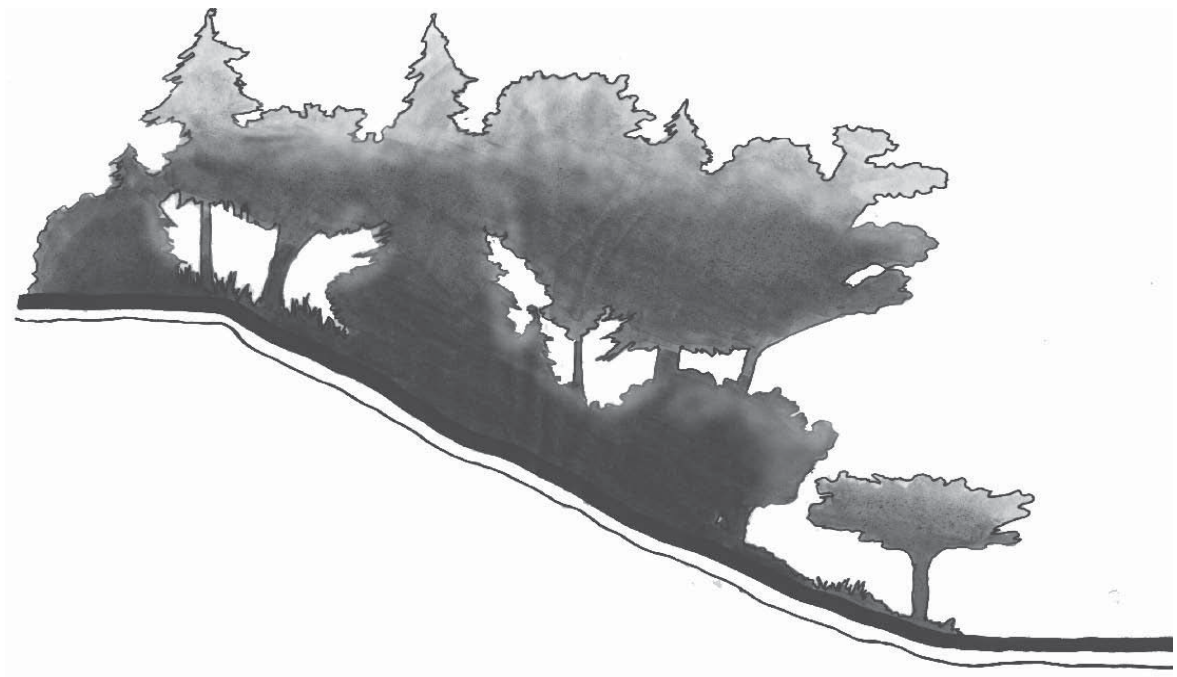
Creating a Backdrop: slopes as a foil for the urban environment

Gentle Slopes



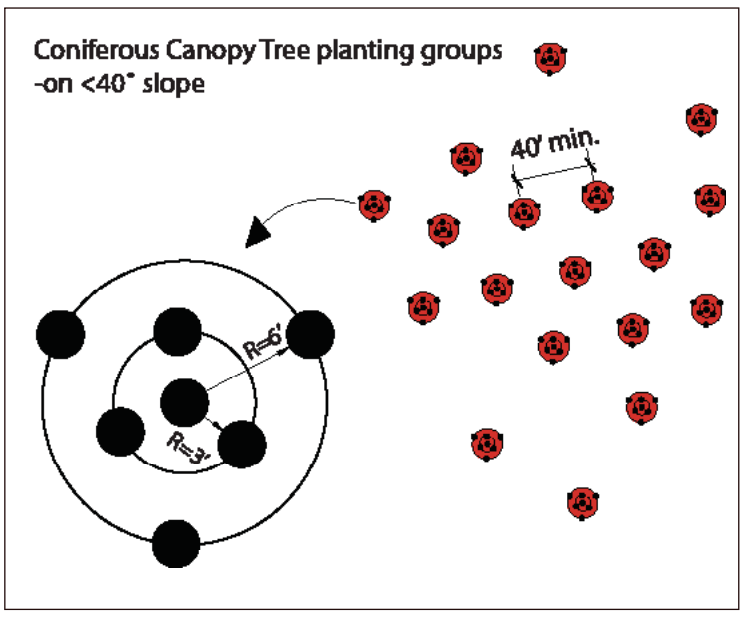
Gentle Slopes (≤40°)
Encourage a mixed coniferous and deciduous forest, diverse in age and species and canopy structure.

"While the drives are successful in opening up the parks to the public and affording them the benefit of enjoying the wonderful views, the detailed landscape treatment has been very much neglected or has been done in a stiff and formal manner distressingly out of harmony with the wild beauty of the natural woods and ground covering growths."

~Olmsted Brothers correspondence from1909 letter

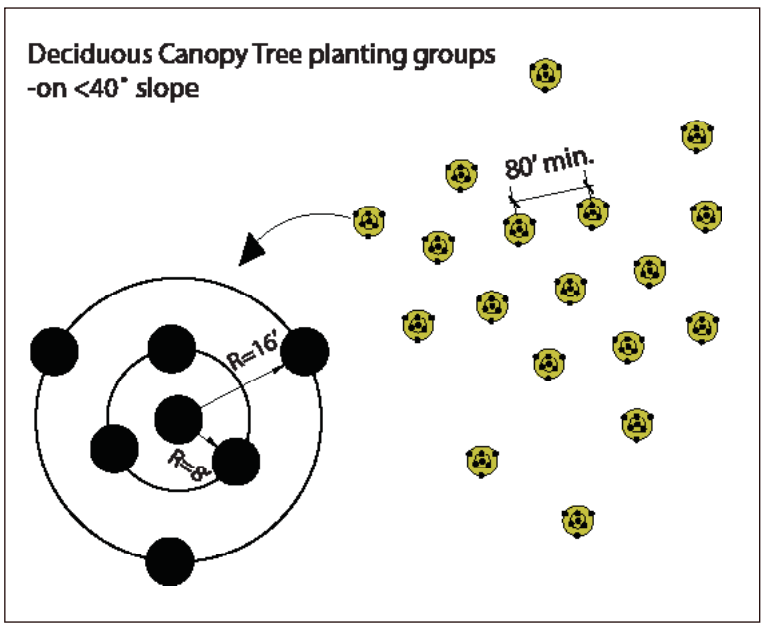
Coniferous- 40'-150' o.c. from nearest coniferous tree group

- Single species within group
- Measure from central tree
- 3 trees @ 3' radius
- 3 trees @ 6' radius
- 2 healthy trees to remain be fore tallest of cluster reaches 20', trees may be snagged or removed



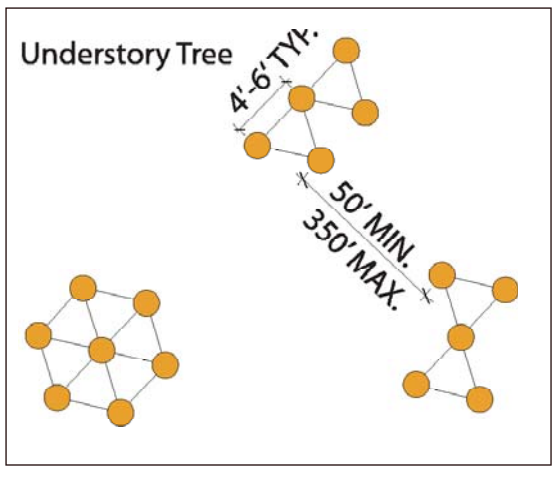
Deciduous- 80'-220' o.c. from nearest deciduous tree group

- Single species within group
- Measure from central tree
- 2 trees @ 8' radius
- 2 trees @ 16' radius
- 1 healthy tree to remain be fore tallest of group reaches 25', trees may be snagged or removed



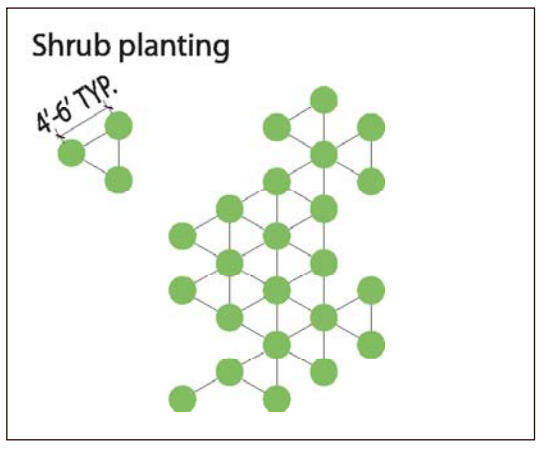
Understory Trees-50'-350' o.c. from nearest understory trees

- Single species within group
- Measure from any understory tree within group
- 5 trees per group minimum
- 10' o.c.
- Not to be planted within 20' of pathways
- May be pruned or removed to make room for the next generation of Canopy Trees



Shrub- 25'-350' o.c. from nearest shrub grouping of same species

- Single species per group
- At least 10 shrubs per group mini mum
- 4'-6' o.c.
- May be pruned or removed to make room for next generations of canopy trees



Creating a Backdrop: slopes as a foil for the urban environment

Steep Slopes

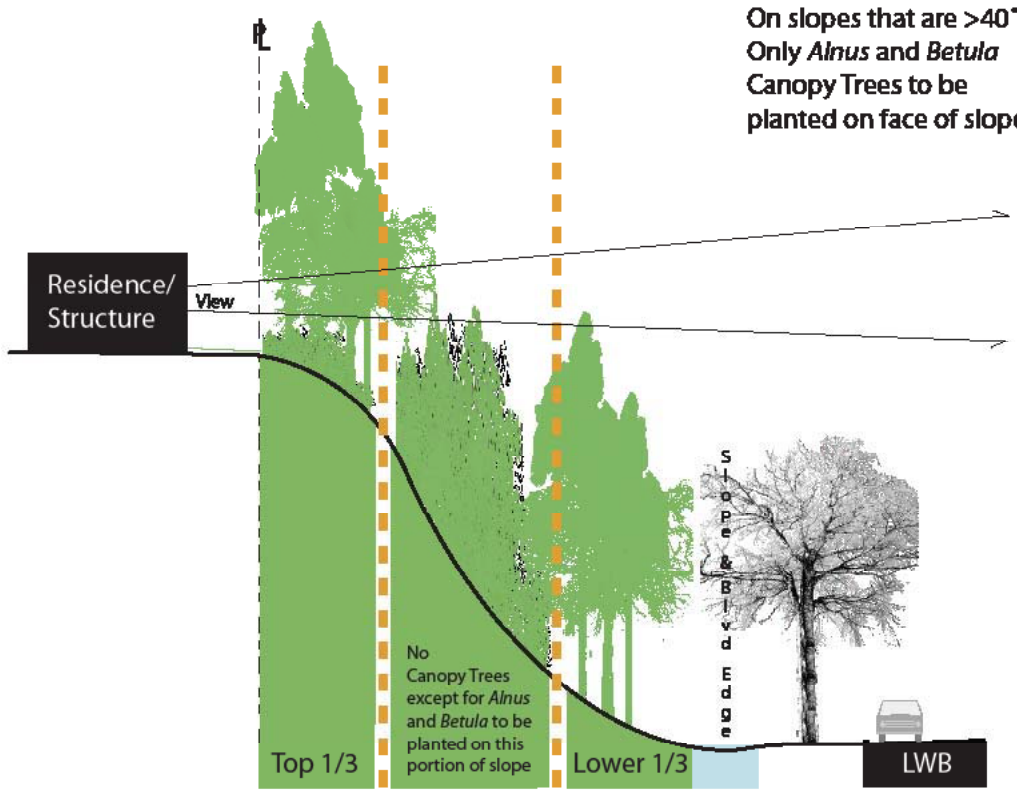
Steep Slopes (≥40°)
Limit large trees from maturing on the face of slopes with a higher angle of repose because slopes are more likely to quickly erode after large tree windthrow events.

Coniferous
- Individual species planted on top or bottom 1/3 of slope @ 25'-150' o.c. from same species.
- Integrate at least 3 different species in 300 linear feet of slope.

Deciduous
- Individual species planted on top or bottom 1/3 of slope @ 80'-220' o.c. from same species
- Integrate at least 2 different species in 300 linear feet of slope

The Washington State Department of Ecology states "Large trees should be used on the face of slopes sparingly and with caution. Should these trees collapse because of undermining of the root system by erosion or by windthrow, large volumes of earth can be disturbed by tree roots when they pull from the slope. The resulting large, bare areas are opened to further erosion, which may endanger adjacent land and vegetation. New major trees should not generally be established on the face of slopes.

Windthrown tree roots (left) expose slopes to erosion and mass wasting events (right).



Sampling of appropriate steep slope understory trees:

Acer circinatum
Amelanchier alnifolia

Sampling of appropriate steep slope shrubs:

Cornus stolonifera
Mahonia aquifolium
Oemleria cerasiformis

Sampling of appropriate steep slope groundcover plants:

Polystichum munitum
Gaultheria shallon
Lonicera involucrata

Slopes >40˚